```
=>    d que stat l11
L3             1 SEA FILE=REGISTRY ABB=ON  SODIUM HYDROXIDE/CN
L4             2 SEA FILE=REGISTRY ABB=ON  (TARTARIC ACID OR CITRIC ACID)/CN
L7          2147 SEA FILE=HCAPLUS ABB=ON  (L3 OR ?SODIUM?(W)?HYDROXIDE?) AND
                 (L4 OR (?TARTARIC? OR ?CITRIC?)(W)?ACID?)
L9            10 SEA FILE=HCAPLUS ABB=ON  L7 AND (?PRETREAT? OR ?TEST?)(W)KIT?
L11            1 SEA FILE=HCAPLUS ABB=ON  L9 AND ?SALIVA?

=> d ibib abs l11

L11  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2004:200141  HCAPLUS
DOCUMENT NUMBER:          140:232110
TITLE:                    Pretreatment kit for
                          saliva and pretreatment method for
                          saliva for determination of mutans
                          streptococci via immunochromatography
INVENTOR(S):              Tachino, Atsushi
PATENT ASSIGNEE(S):       GC Corporation, Japan
SOURCE:                   Eur. Pat. Appl., 19 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     EP 1396726            A1    20040310    EP 2003-18719           20030825
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2004101345         A2    20040402    JP 2002-262838          20020909
     US 2004106096         A1    20040603    US 2003-645540          20030822
     NZ 528008             A     20050324    NZ 2003-528008          20030903
     CN 1492230            A     20040428    CN 2003-159144          20030909
PRIORITY APPLN. INFO.:                       JP 2002-262838      A   20020909
AB   A pretreatment kit and a pretreatment method for
     saliva in identification and quant. determination of mutans streptococci
     by immunochromatog. utilizing an antigen-antibody reaction, which can
     remove aggregation caused by mucin and chain formation of mutans
     streptococci in saliva in a simple operation and can efficiently
     flow out a complex of a labeled antibody and mutans streptococci from a
     porous membrane retaining the labeled antibody, contains (A) a 0.01 to 10
     mol/L aqueous solution of sodium hydroxide, (B) a 0.01 to 3
     mol/L aqueous solution of tartaric acid and/or citric
     acid, and (C) a nonionic surface active agent and/or an amphoteric
     surface active agent, in which the component (C) is mixed with the
     components (A) and/or (B), or is provided sep., and at least one substance
     selected from the particular metallic salts is contained in at least one
     of the components (A), (B) and (C) in an amount of 5 to 25% by weight
REFERENCE COUNT:          4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

```
=> d que stat l12
L3             1 SEA FILE=REGISTRY ABB=ON  SODIUM HYDROXIDE/CN
L4             2 SEA FILE=REGISTRY ABB=ON  (TARTARIC ACID OR CITRIC ACID)/CN
L7          2147 SEA FILE=HCAPLUS ABB=ON  (L3 OR ?SODIUM?(W)?HYDROXIDE?) AND
                 (L4 OR (?TARTARIC? OR ?CITRIC?)(W)?ACID?)
L9            10 SEA FILE=HCAPLUS ABB=ON  L7 AND (?PRETREAT? OR ?TEST?)(W)KIT?
L11            1 SEA FILE=HCAPLUS ABB=ON  L9 AND ?SALIVA?
L12            1 SEA L11

=> d ibib abs l12 1-1

L12  ANSWER 1 OF 1  JAPIO  (C) 2005 JPO  on STN
ACCESSION NUMBER:         2004-101345    JAPIO
TITLE:                    SALIVA PRETREATMENT KIT
                          AND SALIVA PRETREATMENT METHOD
INVENTOR:                 TATENO ATSUSHI
PATENT ASSIGNEE(S):       GC CORP
PATENT INFORMATION:

     PATENT NO        KIND   DATE         ERA     MAIN IPC
     ------------------------------------------------------
     JP 2004101345    A      20040402     Heisei  G01N033-48

APPLICATION INFORMATION
     STN FORMAT:          JP 2002-262838         20020909
     ORIGINAL:            JP2002262838           Heisei
PRIORITY APPLN. INFO.:    JP 2002-262838       20020909
SOURCE:                   PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
                          Applications, Vol. 2004
AN   2004-101345    JAPIO
AB   PROBLEM TO BE SOLVED: To provide a saliva pretreatment
     kit that eliminates an aggregation by the chain of mucine and
     Mutans streptococci in saliva by a simple method in the
     identification/determination of the Mutans streptococci using an immunity
     chromatography method and enable an efficient flow into a membrane where
     the complex of a labeled antibody and the Mutans streptococci retains the
     labeled antibody, and a saliva pretreatment method.
     SOLUTION: The saliva pretreatment kit
     comprises: 0.01-10mol/l sodium hydroxide solution (A);
     0.01-3mol/l tartaric acid and/or citric
     acid solution (B); and a non-ionic surface active agent and/or an
     amphoteric surface active agent (C). The saliva
     pretreatment kit is utilized for pretreating
     saliva. In the saliva pretreatment kit
     , a C constituent is mixed with at least one of A and B constituents or is
     composed apart from the A and B constituents, and at least one kind of
     substance selected from a group of specific metallic salts of 5-25wt.% is
     contained in at least one of the A, B, and C constituents.
     COPYRIGHT: (C)2004,JPO
```

```
=> d que stat l17
L6             2 SEA FILE=REGISTRY ABB=ON  (CHAPS/CN OR CHAPSO/CN)
L13          195 SEA FILE=USPATFULL ABB=ON  L6
L14           19 SEA FILE=USPATFULL ABB=ON  L13 AND ?SURF?(W)?ACTIV?
L16            6 SEA FILE=USPATFULL ABB=ON  L14 AND ?AMPHOTER?
L17            5 SEA FILE=USPATFULL ABB=ON  L16 AND (PRD<20020909 OR PD<20020909
                 )

=> d ibib abs l17 1-5

L17  ANSWER 1 OF 5  USPATFULL on STN
ACCESSION NUMBER:        2003:152847  USPATFULL
TITLE:                   Betaines as adjuvants to susceptibility testing and
                         antimicrobial therapy
INVENTOR(S):             Thornton, Charles G., Damascus, MD, UNITED STATES

                              NUMBER        KIND    DATE
                         ---------------- ------ --------
PATENT INFORMATION:      US 2003104513      A1   20030605
APPLICATION INFO.:       US 2002-125647     A1   20020419  (10)
RELATED APPLN. INFO.:    Continuation-in-part of Ser. No. US 1999-429614, filed
                         on 29 Oct 1999, GRANTED, Pat. No. US 6406880
                         Continuation of Ser. No. WO 1998-US8760, filed on 1 May
                         1998, UNKNOWN

                               NUMBER         DATE
                         ------------------ --------
PRIORITY INFORMATION:    US 1997-45512P     19970502 (60)            <--
DOCUMENT TYPE:           Utility
FILE SEGMENT:            APPLICATION
LEGAL REPRESENTATIVE:    STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK
                         AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
NUMBER OF CLAIMS:        143
EXEMPLARY CLAIM:         1
NUMBER OF DRAWINGS:      56 Drawing Page(s)
LINE COUNT:              4772
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB       The present invention is related to methods and compositions for
         susceptibility testing of bacteria containing mycolic acid structures
         using betaine-like detergents, and inducing the susceptibility of such
         bacteria using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17  ANSWER 2 OF 5  USPATFULL on STN
ACCESSION NUMBER:        2002:144095  USPATFULL
TITLE:                   Betaines as adjuvants to susceptibility testing and
                         antimicrobial therapy
INVENTOR(S):             Thornton, Charles G., Gaithersburg, MD, United States
PATENT ASSIGNEE(S):      Integrated Research Technology, LLC, United States
                         (U.S. corporation)

                              NUMBER        KIND    DATE
                         ---------------- ------ --------
PATENT INFORMATION:      US 6406880         B1   20020618            <--
APPLICATION INFO.:       US 1999-429614          19991029  (9)
RELATED APPLN. INFO.:    Continuation of Ser. No. WO 1998-US8760, filed on 1 May
                         1998
```

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1997-45512P	19970502 (60)	<--

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Woodward, Michael P.
ASSISTANT EXAMINER: Moran, Marjorie A.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 64
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 94 Drawing Figure(s); 55 Drawing Page(s)
LINE COUNT: 4477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is related to methods and compositions for susceptibility testing of bacteria containing mycolic acid structures using betaine-like detergents, and inducing the susceptibility of such bacteria using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 5 USPATFULL on STN
ACCESSION NUMBER: 1999:166812 USPATFULL
TITLE: Method for processing mycrobacteria
INVENTOR(S): Thornton, Charles G., Gaithersburg, MD, United States
PATENT ASSIGNEE(S): Integrated Research Technology, LLC, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6004771		19991221	<--
APPLICATION INFO.:	US 1997-907649		19970811 (8)	

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-393564, filed on 23 Feb 1995, now patented, Pat. No. US 5658749 which is a continuation-in-part of Ser. No. US 1994-322864, filed on 11 Oct 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-224592, filed on 7 Apr 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-222731, filed on 5 Apr 1994, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Leary, Louise N.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 26 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 7838
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for the preparation of Mycobacteria from any liquid, semi solid or exotic source is described. The extracted Mycobacterial sample is suitable for detection by culture and amplification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 4 OF 5 USPATFULL on STN
ACCESSION NUMBER: 97:73459 USPATFULL
TITLE: Method for processing mycobacteria
INVENTOR(S): Thornton, Charles G., Gaithersburg, MD, United States
PATENT ASSIGNEE(S): Corning Clinical Laboratories, Inc., Baltimore, MD,

United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5658749		19970819	<--
APPLICATION INFO.:	US 1995-393564		19950223	(8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-322864, filed on 11 Oct 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-224592, filed on 7 Apr 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-222731, filed on 5 Apr 1994, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Leary, Louise
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox p.l.l.c.
NUMBER OF CLAIMS: 72
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 26 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 8473
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for the preparation of Mycobacteria from any liquid, semi-solid or exotic source is described. The extracted Mycobacterial sample is suitable for detection by culture and amplification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 5 OF 5 USPATFULL on STN
ACCESSION NUMBER: 83:6815 USPATFULL
TITLE: Nondenaturing zwitterionic detergents
INVENTOR(S): Hjelmeland, Leonard M., Bethesda, MD, United States
PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of the Department of Health & Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4372888		19830208	<--
APPLICATION INFO.:	US 1981-294203		19810819	(6)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1980-181465, filed on 26 Aug 1980, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Roberts, Elbert L.
LEGAL REPRESENTATIVE: Roberts, Jr., John S.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1,6
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 356
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A nondenaturing zwitterionic detergent for proteins which, for example, consists of an effective amount of 3-[(3-chloamidopropyl)dimethylammonio]-1-propanesulfonate (CHAPS). This detergent is of extreme interest in the biological study of proteins due to its nondenaturing characteristic. Other examples of the group may be prepared from different alicyclic compounds, for example, utilizing cholic acid and in others deoxycholic acid and dehydroabietic acid. A process for the preparation of these compounds starts with cholic or the equivalent and

from this is prepared the triethylammonium salt in tetrahydrofuran (THF). After the salt is completely dissolved in THF, ethyl chloroformate is added and the flask cooled to 0° C. Then the mixed anhydride which forms is reacted with dimethylaminopropylamine to form the dimethylaminopropyl derivative of a carboxylic acid amide. Finally, the tertiary amine group is reacted with propanesultone to give the sulfobetaine product.

An improved procedure for preparation of these compounds and especially for the last step (as for CHAPSO) to react the N-(3-dimethylaminopropyl)cholamide with sodium-1-chloro-2-hydroxy-3-propanesulfonate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
=> d que stat l25
L19        1336 SEA FILE=HCAPLUS ABB=ON  ?STREPTOCOCC? ?MUTANS? AND (?IDENT?
                OR ?DETERMIN?)
L20          78 SEA FILE=HCAPLUS ABB=ON  L19 AND ?QUANT?
L21          26 SEA FILE=HCAPLUS ABB=ON  L20 AND ?SALIVA?
L22          11 SEA FILE=HCAPLUS ABB=ON  L21 AND ?METHOD?
L23           2 SEA FILE=HCAPLUS ABB=ON  L21 AND KIT?
L24          11 SEA FILE=HCAPLUS ABB=ON  L22 OR L23
L25           8 SEA FILE=HCAPLUS ABB=ON  L24 AND (PRD<20020909 OR PD<20020909)

L25  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2003:582963  HCAPLUS
DOCUMENT NUMBER:          139:130417
TITLE:                    Method for extracting microbial antigen for
                          immunoassay
INVENTOR(S):              Ukaji, Fumio; Hirata, Koichiro; Hanyu, Naohiro
PATENT ASSIGNEE(S):       Tokuyama Corp., Japan; Tokuyama Dental Corp.
SOURCE:                   Jpn. Kokai Tokkyo Koho, 13 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     JP 2003215126         A2    20030730    JP 2002-18905           20020128 <--
PRIORITY APPLN. INFO.:                       JP 2002-18905           20020128 <--
AB   A convenient method is provided for concentrating carbohydrate
     antigen-possessing microorganism (e.g., Streptococcus
     mutans, Streptococcus sobrinus) in a liquid to be extracted (e.g.,
     saliva, tooth fossil), and extracting the carbohydrate antigen.  The
     microorganism quantity in the liquid to be extracted is detd
     . using the carbohydrate antigen extraction liquid obtained.  A liquid to be
extracted
     potentially containing carbohydrate antigen-possessing microorganism is
     filtered with a filter, suitably with a filter with the pore size of
     0.8-2μm, and the carbohydrate antigen is extracted by treating the
     microorganism held on the filter with an aqueous nitrous acid solution  The
     carbohydrate antigen quantity is quantitated by an
     immunoassay using an antibody capable of binding with the carbohydrate
     antigen.


=> d ibib abs l25 2-8
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y


L25  ANSWER 2 OF 8  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2002:978400  HCAPLUS
DOCUMENT NUMBER:          138:44804
TITLE:                    Pretreatment instrument for identification
                          and quantitation of Streptococcus
                          mutans in saliva
INVENTOR(S):              Matsumoto, Yuko; Kobayashi, Yumiko; Okada, Junichi
PATENT ASSIGNEE(S):       GC Corporation, Japan
SOURCE:                   U.S. Pat. Appl. Publ., 11 pp.
                          CODEN: USXXCO
```

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002197738	A1	20021226	US 2002-163614	20020607 <--
JP 2003004605	A2	20030108	JP 2001-188068	20010621
EP 1271124	A1	20030102	EP 2002-12385	20020606 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AU 2002047549	A5	20030102	AU 2002-47549	20020614 <--
AU 782324	B2	20050721		

PRIORITY APPLN. INFO.: JP 2001-188068 A 20010621 <--

AB In a pretreatment instrument and a pretreatment **method** of **saliva**, used for **identification** and **quantitation** of **Streptococcus mutans** in **saliva** by the immunochromatog. **method** utilizing an antigen-antibody reaction, the instrument includes a swab and a mixing container for **saliva** and a treatment liquid, the swab having a stick and a soft synthetic resin-made sponge capable of absorbing a **predetd.** amount or more of **saliva**, and the mixing container being made of a transparent or translucent soft synthetic resin and comprising a bag-like portion formed integrally with and continuously to a constricted portion as the end of a tapering introduction portion having an opening thoroughly larger than the sponge, wherein the constricted portion and the bag-like portion have elasticity such that the sponge can be squashed by a finger pressure in a state that the sponge is inserted therein; the constricted portion has a width such that a pressure can be applied by fingers and has a shape such that when the sponge is taken out in a squashed state by the finger pressure, a min. amount necessary for the pretreatment or more of the **saliva** can be squeezed out.

L25 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:246828 HCAPLUS
DOCUMENT NUMBER: 137:2831
TITLE: Molecular analysis of bacterial species associated with childhood caries
AUTHOR(S): Becker, Mitzi R.; Paster, Bruce J.; Leys, Eugene J.; Moeschberger, Melvin L.; Kenyon, Sarah G.; Galvin, Jamie L.; Boches, Susan K.; Dewhirst, Floyd E.; Griffen, Ann L.
CORPORATE SOURCE: Department of Pediatric Dentistry, The Ohio State University, Columbus, OH, 43218-2357, USA
SOURCE: Journal of Clinical Microbiology (**2002**), 40(3), 1001-1009
CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Although substantial epidemiol. evidence links **Streptococcus mutans** to caries, the pathobiol. of caries may involve more complex communities of bacterial species. Mol. **methods** for bacterial **identification** and enumeration now make it possible to more precisely study the microbiota associated with dental caries. The purpose of this study was to compare the bacteria found in early childhood caries (ECC) to those found in caries-free children by using mol. **identification methods.** Cloning and sequencing of

bacterial 16S ribosomal DNAs from a healthy subject and a subject with ECC were used for **identification** of novel species or uncultivated phylotypes and species not previously associated with dental caries. Ten novel phylotypes were **identified.** A number of species or phylotypes that may play a role in health or disease were **identified** and warrant further investigation. In addition, **quant.** measurements for 23 previously known bacterial species or species groups were obtained by a reverse capture checkerboard assay for 30 subjects with caries and 30 healthy controls. Significant differences were observed for nine species: S. sanguinis was associated with health and, in order of decreasing cell nos., Actinomyces gerencseriae, Bifidobacterium, S. mutans, Veillonella, S. **salivarius**, S. constellatus, S. parasanguinis, and Lactobacillus fermentum were associated with caries. These data suggest that A. gerencseriae and other Actinomyces species may play an important role in caries initiation and that a novel Bifidobacterium may be a major pathogen in deep caries. Further investigation could lead to the **identification** of targets for biol. interventions in the caries process and thereby contribute to improved prevention of and treatment for this significant public health problem.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:326111 HCAPLUS
DOCUMENT NUMBER: 133:325439
TITLE: Effect of an essential oil-containing antiseptic mouthrinse on plaque and **salivary Streptococcus mutans** levels
AUTHOR(S): Fine, D. H.; Furgang, D.; Barnett, M. L.; Drew, C.; Steinberg, L.; Charles, C. H.; Vincent, J. W.
CORPORATE SOURCE: Dental Research Center, New Jersey Dental School, Newark, NJ, USA
SOURCE: Journal of Clinical Periodontology (**2000**), 27(3), 157-161
CODEN: JCPEDZ; ISSN: 0303-6979
PUBLISHER: Munksgaard International Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Background: Clin. studies in which antimicrobial mouthrinses were shown to have significant antiplaque activity most frequently have used gingivitis as the clin. relevant endpoint. However, there is evidence to suggest that mouthrinses containing active agents effective against S. mutans, such as chlorhexidine, may also have a role in inhibiting dental caries. This clin. study was conducted to **determine** the effect of 2+ daily rinsing with an essential oil-containing antiseptic mouthrinse (Listerine Antiseptic) on levels of recoverable S. mutans and total streptococci in supragingival interproximal plaque and in **saliva.** Addnl., a follow-up in vitro study is reported which **determined** whether a differential susceptibility to the antiseptic mouthrinse exists among different strains of streptococci. **Method**: Following baseline **saliva** and plaque sampling for **quantification** of recoverable S. mutans and total streptococci, 29 qualifying subjects were randomly assigned either the essential oil mouthrinse or a sterile water control. They rinsed with 20 mL for 30 s 2+ daily for 11 days and once on the 12th day, in addition to their usual oral hygiene procedures. On day 12, **saliva** and plaque samples were again collected and microbiol. **quantification** performed. The procedures were repeated with the alternate rinse after a 1-wk washout period. Results:

The essential oil mouthrinse produced resp. redns. of 69.9 and 75.4% in total recoverable streptococci and in S. mutans in plaque, and corresponding redns. of 50.8 and 39.2% in **saliva.** The in vitro study revealed that streptococci from the mutans group were more susceptible to the bactericidal activity of the essential oil mouthrinse than streptococci from the mitis group. Conclusions: As antimicrobial mouthrinses are most frequently recommended to patients whose mech. oral hygiene procedures are not adequate for the control of supragingival plaque and gingivitis, this study provides an addnl. rationale for the inclusion of the essential-oil mouthrinse as an adjunct to daily oral hygiene procedures.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:761458 HCAPLUS
DOCUMENT NUMBER: 132:19597
TITLE: Probes and primers for the detection of common bacterial and fungal pathogens and antibiotic resistance genes in clinical specimens
INVENTOR(S): Bergeron, Michel G.; Picard, Francois J.; Ouellette, Marc; Roy, Paul H.
PATENT ASSIGNEE(S): Infectio Diagnostic, Inc., Can.
SOURCE: U.S., 142 pp., Cont.-in-part of U.S. Ser. No. 526,840.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5994066	A	19991130	US 1996-743637	19961104 <--
US 6001564	A	19991214	US 1995-526840	19950911 <--
CA 2270281	AA	19980514	CA 1997-2270281	19971104 <--
WO 9820157	A2	19980514	WO 1997-CA829	19971104 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9748598	A1	19980529	AU 1997-48598	19971104 <--
AU 731850	B2	20010405		
EP 943009	A2	19990922	EP 1997-911094	19971104 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9713494	A	20000229	BR 1997-13494	19971104 <--
CN 1248295	A	20000322	CN 1997-180194	19971104 <--
NZ 335548	A	20010330	NZ 1997-335548	19971104 <--
JP 2001504330	T2	20010403	JP 1998-520907	19971104 <--
NO 9901976	A	19990702	NO 1999-1976	19990426 <--
AU 775763	B2	20040812	AU 2001-54221	20010704 <--
US 2003180733	A1	20030925	US 2002-121120	20020411 <--
US 2005042606	A9	20050224		
PRIORITY APPLN. INFO.:			US 1995-526840 A2	19950911 <--
			US 1994-304732 A2	19940912 <--

	US 1996-743637	A	19961104 <--
	AU 1997-48598	A3	19971104 <--
	WO 1997-CA829	W	19971104 <--
	US 1999-452599	A1	19991201 <--

AB The present invention relates to a **method** for universal detection of bacteria in biol. samples and for specific detection of Escherichia coli, Klebsiella pneumoniae, Enterococcus faecalis, Pseudomonas aeruginosa, Proteus mirabilis, Staphylococcus saprophyticus, Streptococcus pneumoniae, Moraxella catarrhalis and Haemophilus influenzae in urine or any other biol. samples. The **method** comprising denaturation of bacterial DNA to single stranded form and either fixing it on a support or leaving it in solution, contacting said single stranded genetic material with a labeled probe selected from the group consisting of (i) fragments of chromosomal DNA of the above-mentioned bacteria and (ii) synthetic oligonucleotides whose sequences are derived either from the said fragments of chromosomal DNAs or from sequences available in data banks, all (i and ii) probes being capable to hybridize specifically to their chromosomal DNA or, in case of universal probes, to any bacterial chromosomal DNA. Probes and primers that can be used to **identify** and **quantify** DNA from the above species are disclosed. Similarly, reagents for detecting, **identifying**, and **quantifying** the antibiotic resistance genes: blatem, blarob, blashv, blaoxa, blaZ, aadB, aacC1, aacC2, aacC3, aacA4, aac6'-IIa, ermA, ermB, ermC, mecA, vanA, vanB, vanC, satA, aac(6'-aph(2")), aad(6'), vat, vga, msrA, sul and int are reported. The above microbial species, genera and resistance genes are all clin. relevant and commonly encountered in a variety of clin. specimens. These DNA-based assays are rapid, accurate and can be used in clin. microbiol. labs. for routine diagnosis. These novel diagnostic tools should be useful to improve the speed and accuracy of diagnosis of microbial infections, thereby allowing more effective treatments.

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:527829 HCAPLUS
DOCUMENT NUMBER: 117:127829
TITLE: Immunoassay and **kits** for detecting and **quantifying** cariogenic bacteria
INVENTOR(S): Miyazaki, Toshitsugu; Matsuda, Yoko; Nakamura, Tsutomu; Ota, Fusao; Nishino, Mizuho
PATENT ASSIGNEE(S): Nagase and Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 496345	A1	19920729	EP 1992-100923	19920121 <--
EP 496345	B1	19960828		
R: DE, DK, GB, NL, SE				
JP 05005744	A2	19930114	JP 1991-227539	19910907 <--
JP 3093833	B2	20001003		
CA 2059690	AA	19920723	CA 1992-2059690	19920120 <--

PRIORITY APPLN. INFO.:	JP 1991-22858	A	19910122 <--
	JP 1991-227539	A	19910907 <--

AB In the title **method**, (1) **Streptococcus mutans** in a sample to be examined is reacted with ≥1 polyclonal or monoclonal antibody having a specific reactivity to the microorganism; (2) the antibody bound to the microorganism is separated from unbound antibody by filtration on a membrane filter; and (3) the bound antibody captured on the filter is detected by a suitable means. The **method** allows rapid and convenient detection of S. mutans with high sensitivity, without the need for selective cultivation of a sample before detection, and without the problem of decrease of survival rate of bacteria caused by time lag between sample collection and detection. **Kits** for performing the **method** are also disclosed. Standard curves for the **determination** are presented. S. mutans was detected in a **saliva** sample.

L25 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1988:109304 HCAPLUS
DOCUMENT NUMBER: 108:109304
TITLE: Effect of nutritional constraints on the biosynthesis of the components of the phosphoenolpyruvate:sugar phosphotransferase system in a fresh isolate of **Streptococcus mutans**
AUTHOR(S): Rodrigue, Lynda; Lacoste, Lucille; Trahan, Luc; Vadeboncoeur, Christian
CORPORATE SOURCE: Ec. Med. Dent., Univ. Laval, Ste-Foy, QC, G1K 7P4, Can.
SOURCE: Infection and Immunity (**1988**), 56(2), 518-22
CODEN: INFIBR; ISSN: 0019-9567
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A procedure for the purification of enzyme I (EI) and the protein HPr, the general components of the phosphoenolpyruvate:sugar phosphotransferase system, from S. mutans serotype c is presented. The **method** was also applied successfully to the purification of EI and HPr from S. **salivarius**, S. sobrinus, and S. sanguis. Using specific antibodies obtained against the proteins purified from S. mutans DR0001, cellular levels of EI and HPr were **determined quant.** by rocket electrophoresis in a freshly isolated strain of S. mutans grown under various conditions in continuous culture. The activity of a few specific EIIs was also **determined** by an in vitro phosphorylation test. Maximum EII activities for glucose, mannose, and 2-deoxyglucose were obtained under conditions of glucose limitation, at pH 7.0 and low dilution rate (D = 0.057/h). Increasing the amount of glucose or the dilution rate (D = 0.40/h) or decreasing the pH from 7.0 to 5.5 resulted in a 1.4- to 24-fold decrease in these activities. The EII activity for fructose was not influenced by the growth conditions in the same way as the other EIIs. The fructose EII was highest at pH 5.5 and at high dilution rate under conditions of glucose or nitrogen limitation and was always repressed at pH 7.0 and at low dilution rates. The intracellular levels of EI were also dependent on the growth conditions. The highest concentration (0.65 nmol/mg of protein) was observed in cells grown under glucose limitation at pH 7.0 and high dilution rate, and the lowest concentration (0.12 nmol/mg of protein) was found in cells grown under glucose excess at pH 7.0 and high dilution rate. The other general component of the phosphoenolpyruvate:sugar phosphotransferase system, the protein HPr, was not influenced significantly by varying growth conditions.

L25 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1981:12366 HCAPLUS

DOCUMENT NUMBER: 94:12366
TITLE: The **determination** of various low-molecular-weight carboxylic acids in biological samples by isotachophoresis
AUTHOR(S): Van der Hoeven, J. S.; Franken, H. C. M.
CORPORATE SOURCE: Inst. Prevent. Community Dent., Univ. Nijmegen, Nijmegen, Neth.
SOURCE: Analytical Chemistry Symposia Series (**1980**), 5(Biochem. Biol. Appl. Isotachophoresis), 69-79
CODEN: ACSSDR; ISSN: 0167-6350
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Low-mol.-weight carboxylic acids were **determined** in biol. samples such as bacterial culture fluids, dental plaque, blood, serum, and **saliva** by isotachophoresis involving the simultaneous operation of both a UV and a conductivity detector. Isotachophoresis was performed in a 20-cm PTFE capillary (0.4-mm internal diameter). The leading electrolyte was buffered HCl, generally at a concentration of 2.5 mM and pH 3.9, containing 0.05% poly(vinyl alc.). The counterion was selected according to the desired pH, and its pKa was close to the pH of the electrolyte for maximum buffering capacity. Thus, when the pH of the leading electrolyte was 3.9, 4-aminobutyric acid (pKa 4.03) was used as the counterion. At pH 4.2 and 4.4, ε-aminocaproic acid (pKa 4.37) was used as the counter ion. The terminating electrolyte was 2.5 mM caproic acid buffered to pH 5.5 with Tris. Variation of the pH of the leading electrolyte resulted in changes in the effective mobilities and the migration rate of the ions. Thus, pH changes were applied to **identify** or confirm the **identity** of the ionic species. The anal. time was 8-12 min, depending on the sample. **Quant.** detns. were achieved by using a sep. calibration curve for each pH value. The resolution and reproducibility were satisfactory, and no internal stds. were necessary. There was a linear relation between the concentration of lactate in blood **determined** by isotachophoresis and enzymically. The advantages of the **method** are that no sample pretreatment is required and small amts. of sample can be used.

```
=> d que stat l30
L19         1336 SEA FILE=HCAPLUS ABB=ON  ?STREPTOCOCC? ?MUTANS? AND (?IDENT?
                 OR ?DETERMIN?)
L20           78 SEA FILE=HCAPLUS ABB=ON  L19 AND ?QUANT?
L21           26 SEA FILE=HCAPLUS ABB=ON  L20 AND ?SALIVA?
L22           11 SEA FILE=HCAPLUS ABB=ON  L21 AND ?METHOD?
L23            2 SEA FILE=HCAPLUS ABB=ON  L21 AND KIT?
L24           11 SEA FILE=HCAPLUS ABB=ON  L22 OR L23
L26           62 SEA L24
L27           39 DUP REMOV L26 (23 DUPLICATES REMOVED)
L28            4 SEA L27 AND ?CHROMATOG?
L29            5 SEA L27 AND ?IMMUNO?
L30            7 SEA L28 OR L29

=> d ibib abs l30

L30  ANSWER 1 OF 7     MEDLINE on STN
ACCESSION NUMBER:    81191059     MEDLINE
DOCUMENT NUMBER:     PubMed ID: 7014466
TITLE:               Interference of secretory immunoglobulin A with
                     sorption of oral bacteria to hydroxyapatite.
AUTHOR:              Kilian M; Roland K; Mestecky J
CONTRACT NUMBER:     AI 10854 (NIAID)
     DE-02670 (NIDCR)
     DE-52456 (NIDCR)
SOURCE:              Infection and immunity, (1981 Mar) 31 (3) 942-51.
                     Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         198107
ENTRY DATE:          Entered STN: 19900316
                     Last Updated on STN: 20000303
                     Entered Medline: 19810720
AB   The potential of secretory immunoglobulin A (S-IgA) to interfere
     with the initial phase of dental plaque formation was studied by using an
     in vitro method which permits the quantitative
     determination of the sorption of radiolabeled oral bacterial cells
     to hydroxyapatite (HA) beads. The importance of specific S-IgA antibodies
     was evaluated by a comparison of the effect of pure preparations of
     colostral S-IgA, polymeric myeloma IgA, or preabsorbed S-IgA. Specific
     antibody molecules bound at the HA surface significantly enhanced the
     sorption of two Streptococcus sanguis strains. In contrast, HA-bound
     S-IgA antibodies inhibited the sorption of Streptococcus mitior and
     Streptococcus salivarius. The same was true for
     Streptococcus mutans cells, but only when they were
     propagated in the absence of sucrose. Suspended in saliva,
     cells of all streptococcal species adhered in significantly lower numbers
     to HA. Comparative experiments with bacteria suspended in solutions of
     various preparations of IgA or immunoglobulin-deficient
     salivas with S-IgA or myeloma IgA added indicated that the
     adherence inhibition seen with S. Sanguis, S. mitior, S.
     salivarius, and glucose-grown S. mutans was partly attributable to
     functions of S-IgA antibodies. Under the in vitro conditions of the
     study, S-IgA antibodies had no effect on the sorption of sucrose-grown S.
     mutans, Actinomyces viscosus, and Actinomyces naeslundii to HA. The
     results indicated that S-IgA can interfere with the sorption of some oral
     bacteria to HA by several different functions.
```

. .

=> d ibib abs l30 2-7

L30 ANSWER 2 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 2004:409114 BIOSIS
DOCUMENT NUMBER: PREV200400410206
TITLE: **Salivary** IgA to cariogenic bacteria in HIV-positive children and its correlation with caries prevalence and levels of cariogenic microorganisms.
AUTHOR(S): Castro, G. F.; Souza, I. P. R.; Lopes, S.; Stashenko, P.; Teles, R. P. [Reprint Author]
CORPORATE SOURCE: Dept Periodontol, Forsyth Inst, 140 Fenway, Boston, MA, 02115, USA
rteles@forsyth.org
SOURCE: Oral Microbiology and Immunology, (October 2004) Vol. 19, No. 5, pp. 281-288. print.
ISSN: 0902-0055 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 20 Oct 2004
Last Updated on STN: 20 Oct 2004

AB The interrelationship of HIV infection, dental caries and mucosal immune responses remains controversial. In our study population of 40 HIV-infected and 40 healthy control children (ages 2-5 years) there was a significantly higher prevalence of dental caries in HIV-infected children ($P<0.05$). The extent of caries correlated with the severity of HIV disease. To **determine** whether the **immunosuppression** that ensues after HIV infection could contribute to the increased caries prevalence, the concentrations of total IgA and IgA specific to cariogenic bacteria (**Streptococcus mutans**, Streptococcus sobrinus and Lactobacillus acidophilus) were **determined** in whole **saliva** by enzyme-linked **immunosorbent** assay . Levels of the same bacteria were also **quantified** in **saliva** using checkerboard DNA-DNA hybridization. A significantly increased level of total **salivary** IgA was found in the HIV-positive population ($P < 0.05$), but there were comparable titers of specific IgA to cariogenic bacteria in HIV-positive and healthy controls. The microbiological assessment also demonstrated similar levels of cariogenic microorganisms in both groups. We conclude that HIV-positive children appear to maintain the capacity to mount a mucosal immune response to cariogenic microorganisms, at least until late stages of disease.

L30 ANSWER 3 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:78995 BIOSIS
DOCUMENT NUMBER: PREV199900078995
TITLE: A synthetic peptide adhesion epitope as a novel antimicrobial agent.
AUTHOR(S): Kelly, Charles G. [Reprint author]; Younson, Justine S.; Hikmat, Ban Y.; Todryk, Stephen M.; Czisch, Michael; Haris, Parvez I.; Flindall, Ian R.; Newby, Craig; Mallet, Anthony I.; Ma, Julian K.-C.; Lehner, Thomas
CORPORATE SOURCE: Dep. Immunol., United Med. Dent. Sch. Guy's Hosp., London SE1 9RT, UK
SOURCE: Nature Biotechnology, (Jan., 1999) Vol. 17, No. 1, pp. 42-47. print.
ISSN: 1087-0156.
DOCUMENT TYPE: Article
LANGUAGE: English

ENTRY DATE: Entered STN: 1 Mar 1999
Last Updated on STN: 1 Mar 1999

AB The earliest step in microbial infection is adherence by specific microbial adhesins to the mucosa of the oro-intestinal, nasorespiratory, or genitourinary tract. We inhibited binding of a cell surface adhesin of **Streptococcus mutans** to **salivary** receptors in vitro, as measured by surface plasmon resonance, using a synthetic peptide (p1025) corresponding to residues 1025-1044 of the adhesin. Two residues within p1025 that contribute to binding (01025, E1037) were **identified** by site-directed mutagenesis. In an in vivo human streptococcal adhesion model, direct application of p1025 to the teeth prevented recolonization of S. mutans but not Actinomyces, as compared with a control peptide or saline. This novel antimicrobial strategy, applying competitive peptide inhibitors of adhesion, may be used against other microorganisms in which adhesins mediate colonization of mucosal surfaces.

L30 ANSWER 4 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1993:362984 BIOSIS
DOCUMENT NUMBER: PREV199396048659
TITLE: Simultaneous **determination** of amoxycillin and dicloxacillin in capsules by potentiometric titrimetry and high-performance liquid **chromatography.**
AUTHOR(S): Abdel-Moety, Ezzat M. [Reprint author]; Abounassif, Mohammad A.; Gad-Kariem, El-Rasheed A.; Khattab, Nashaat A.
CORPORATE SOURCE: Pharmaceutical Chemistry Dep., Coll. Pharmacy, King Saud Univ., PO Box 2457, Riyadh-11451, Saudi Arabia
SOURCE: Talanta, (1993) Vol. 40, No. 6, pp. 811-817.
CODEN: TLNTA2. ISSN: 0039-9140.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Aug 1993
Last Updated on STN: 8 Aug 1993

AB Direct potentiometric titration and two HPLC conditions for the simultaneous **determination** of amoxycillin and dicloxacillin in their capsules have been developed. One-run titration utilizing 0.05 M acet. HClO-4 enables the **quantification** of both antibiotics. The HPLC-separation could be undertaken on reversed phase, LiChrosorb RP-18 (10 mu-m), and LiChrospher 100 RP-18 (5 mu-m), columns by using mobile phases containing acetonitrile + 1% aq, acetic acid, in proportions of 47:53 or 39:61 (v/v), respectively, at a flow rate of 1.5 ml/min with UV-detection at 240 nm. Recoveries of the individual drugs by the application of each described **method** were found to be fairly satisfactory.

L30 ANSWER 5 OF 7 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1977:133970 BIOSIS
DOCUMENT NUMBER: PREV197763028834; BA63:28834
TITLE: SELECTIVE ADSORPTION OF HETEROPHILE POLY GLYCERO PHOSPHATE ANTIGEN FROM ANTIGEN EXTRACTS OF **STREPTOCOCCUS-MUTANS** AND OTHER GRAM POSITIVE BACTERIA.
AUTHOR(S): HAMADA S; TAI S; SLADE H D
SOURCE: Infection and Immunity, (1976) Vol. 14, No. 4, pp. 903-910.
CODEN: INFIBR. ISSN: 0019-9567.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable

AB Hot saline extracts of S. mutans contain antigenic substances which occasionally react nonspecifically with some antisera against whole cells

of various serological groups and types of streptococci. **Chromatography** of the extract of S. mutans strain MT703 (serotype e) on a DEAE-Sephadex A-25 column gave 2 principal antigens. One antigen was eluted without adsorption to the resin and was **identified** as the serotype-specific polysaccharide. The other antigen, which contained a large **quantity** of P, was adsorbed to and released from the resin by gradient elution. It was reactive against the antisera specific for polyglycerophosphate (PGP) from group A S. pyogenes and/or S. mutans strain Ingbritt (type c). The PGP antigen was further purified by gel filtration with Sephadex G-75. Two peaks, PGP-1 and PGP-2, were obtained. Each possessed the same antigenic specificity to anti-PGP serum as shown by **immunodiffusion.** Chemical analyses revealed that the molar ratio of P to glycerol in both was about 1:1, although the protein content between the 2 was significantly different. PGP antigen was found to be widely distributed in hot saline extracts from various gram positive bacteria [Streptococcus spp. of Groups A,C,D,E,H,G,L,N and R, S. sanguis, S. **salivarius**, S. bovis, S. mitis, Lactobacillus plantarum, L. casei, L. fermentum and Staphylococcus aureus], with a few exception [Actinomyces naeslundii, A. viscosus, Streptococcus Group O, Micrococcus luteus and M. citreus]. All gram negative bacteria examined [Proteus mirabilis, Escherichia coli, Serratia marcescens, Neisseria perflava, Leptotrichia buccalis and Fusobacterium nucleatum] were free of PGP. The PGP in the hot saline extracts of various gram positive bacteria possessed an essentially **identifical** antigenic specificity. The addition of DEAE-Sephadex A-25 resin to hot saline extracts successfully removed the cross-reacting PGP antigen. After adsorption of the extract from S. mutans, the supernatant contained only type-specific polysaccharide antigen, except type b, in which type b-specific polysaccharide and PGP antigens were adsorbed with the resin. This simple procedure should be useful for the removal of the PGP-type teichoic acid from antigen extracts of bacteria that contain uncharged polysaccharides.

L30 ANSWER 6 OF 7 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 77173033 EMBASE
DOCUMENT NUMBER: 1977173033
TITLE: Latex spheres as **immunologic** markers to demonstrate the binding of human **salivary immunoglobulins** to **Streptococcus mutans.**
AUTHOR: Riviere G.R.; Cotton W.R.; Derkowski J.L.
CORPORATE SOURCE: Nav. Dent. Res. Inst., Great Lakes, Ill. 60088, United States
SOURCE: Journal of Dental Research, (1976) Vol. 55, No. 5, pp. 879-885.
CODEN: JDREAF
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
004 Microbiology
011 Otorhinolaryngology
026 Immunology, Serology and Transplantation
LANGUAGE: English

AB The results of this study indicate that latex beads can be used to **identify** specific antigen antibody interactions on the surface of bacterial cells. The application of a Labeling Index allowed specific interactions to be **quantitatively** distinguished from nonspecific latex bead attachments. The labeling indexes for latex beads absorbed to **antisalivary immunoglobulins** were significantly higher than for negative control indexes when tested against S mutans treated

with **saliva**. Conversely, there was no significant difference when they were tested against nonoral bacteria treated with **saliva**. This suggests that both whole and parotid human **saliva** contained specific antibodies against S mutans.

L30 ANSWER 7 OF 7 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 920646383 JICST-EPlus
TITLE: Studies on Monoclonal Antibodies against **Streptococcus mutans** Serotype e Strains.
AUTHOR: ONO MIWAKO
CORPORATE SOURCE: Kyushu Dental College
SOURCE: Kyushu Shika Gakkai Zasshi (Journal of the Kyushu Dental Society), (1992) vol. 46, no. 4, pp. 547-557. Journal Code: F0834A (Fig. 8, Tbl. 4, Ref. 34)
CODEN: KSGZA3; ISSN: 0368-6833
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New

AB Monoclonal antibody-secreting hybridomas were produced by fusing myeloma cells (SP2/0-Agl 4) with spleen cells taken from mice (BALB/c) which had been immunized with **Streptococcus mutans** (serotype e) whole cells. Antigen was extracted by autoclaving the cells of S. mutans (serotype e) in saline solution and purified on DEAE-Sephadex A-25, Sephadex G-200 and CM-Sephadex C-25 columns. The purified polysaccharide antigen consisted of rhamnose (69.6%) and glucose (30.4%) when **determined** by gas **chromatography**. Nine monoclonal antibodies reacting with the serotype e strains of S. mutans were examined **immunologically** for their specificity against crude and purified polysaccharide antigen preparations of the strains and whole cells of various members of the mutans group of streptococci. The **immunological methods** included **immunodiffusion** in gel, **quantitative** precipitin reactions, radioimmunoassay and enzyme **immunoassay**. Two monoclonal antibodies, S3-9 and S3-17 reacted in these **immunological** reactions not only with whole cells of serotype e strains of S. mutans but also with the antigen preparations from these strains. It was revealed in competitive **quantitative** precipitin reactions that among varying haptenic sugars tested beta-methyl-D-glucopyranoside and cellobiose had a marked inhibitory effect on the reactions whereas maltose did not have the effect. It was also shown by enzyme **immunoassay** that monoclonal antibody S3-9 did not react with whole cells of four strains of S. mitis, two strains of S. **salivarius** and four strains of S. sanguis. (abridged author abst.)

```
=> d que stat l35
L19         1336 SEA FILE=HCAPLUS ABB=ON  ?STREPTOCOCC? ?MUTANS? AND (?IDENT?
                 OR ?DETERMIN?)
L20           78 SEA FILE=HCAPLUS ABB=ON  L19 AND ?QUANT?
L21           26 SEA FILE=HCAPLUS ABB=ON  L20 AND ?SALIVA?
L22           11 SEA FILE=HCAPLUS ABB=ON  L21 AND ?METHOD?
L23            2 SEA FILE=HCAPLUS ABB=ON  L21 AND KIT?
L24           11 SEA FILE=HCAPLUS ABB=ON  L22 OR L23
L25            8 SEA FILE=HCAPLUS ABB=ON  L24 AND (PRD<20020909 OR PD<20020909)
L32          186 SEA FILE=USPATFULL ABB=ON  L25 AND ?CHROMATOG?
L33          144 SEA FILE=USPATFULL ABB=ON  L32 AND ?IMMUNO?
L34           39 SEA FILE=USPATFULL ABB=ON  L33 AND ?ANTIGEN?(W)?ANTIBOD?
L35           11 SEA FILE=USPATFULL ABB=ON  L34 AND ?MUCIN?

=> d ibib abs l35 1-11

L35  ANSWER 1 OF 11  USPATFULL on STN
ACCESSION NUMBER:        2005:158196  USPATFULL
TITLE:                   Nucleic acid and amino acid sequences relating to
                         streptococcus pneumoniae for diagnostics and
                         therapeutics
INVENTOR(S):             Doucette-Stamm, Lynn A., Framingham, MA, UNITED STATES
                         Bush, David, Somerville, MA, UNITED STATES

                              NUMBER        KIND    DATE
                         ---------------- ------ --------
PATENT INFORMATION:      US 2005136404      A1   20050623
APPLICATION INFO.:       US 2003-617320     A1   20030710  (10)
RELATED APPLN. INFO.:    Division of Ser. No. US 1998-107433, filed on 30 Jun
                         1998, PENDING

                                NUMBER         DATE
                         ------------------ --------
PRIORITY INFORMATION:    US 1997-51553P     19970702 (60)            <--
                         US 1998-85131P     19980512 (60)            <--
DOCUMENT TYPE:           Utility
FILE SEGMENT:            APPLICATION
LEGAL REPRESENTATIVE:    Robert L. Spadafora, Genome Therapeutics Corporation,
                         100 Beaver Street, Waltham, MA, 02453, US
NUMBER OF CLAIMS:        28
EXEMPLARY CLAIM:         1
LINE COUNT:              12957
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB       The invention provides isolated polypeptide and nucleic acid sequences
         derived from Streptococcus pneumonia that are useful in diagnosis and
         therapy of pathological conditions; antibodies against the polypeptides;
         and methods for the production of the polypeptides. The
         invention also provides methods for the detection, prevention
         and treatment of pathological conditions resulting from bacterial
         infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35  ANSWER 2 OF 11  USPATFULL on STN
ACCESSION NUMBER:        2004:250212  USPATFULL
TITLE:                   Nucleic acid and amino acid sequences relating to
                         Streptococcus pneumoniae for diagnostics and
                         therapeutics
INVENTOR(S):             Doucette-Stamm, Lynn A., Framingham, MA, United States
```

Bush, David, Somerville, MA, United States
PATENT ASSIGNEE(S): Genome Therapeutics Corporation, Waltham, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6800744	B1	20041005	
APPLICATION INFO.:	US 1998-107433		19980630	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1998-85131P	19980512 (60)	<--
	US 1997-51553P	19970702 (60)	<--

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Brusca, John S.
ASSISTANT EXAMINER: Zhou, Shubo "Joe "
LEGAL REPRESENTATIVE: Genome Therapeutics Corporation
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 11545
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated polypeptide and nucleic acid sequences derived from Streptococcus pneumonia that are useful in diagnosis and therapy of pathological conditions; antibodies against the polypeptides; and **methods** for the production of the polypeptides. The invention also provides **methods** for the detection, prevention and treatment of pathological conditions resulting from bacterial infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 3 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2004:57030 USPATFULL
TITLE: Vaccine
INVENTOR(S): McKenzie, Ian Farquhar Campbell, Brunswick, AUSTRALIA
Pietersz, Geoffrey Allan, Greensborough, AUSTRALIA
Cheers, Christina, Sunbury, AUSTRALIA
Stambas, John, Footscray, AUSTRALIA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004043032	A1	20040304	
APPLICATION INFO.:	US 2003-297256	A1	20030512	(10)
	WO 2001-AU669		20010606	

	NUMBER	DATE	
PRIORITY INFORMATION:	AU 2000-7977	20000606	<--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NATH & ASSOCIATES, 1030 15th STREET, 6TH FLOOR, WASHINGTON, DC, 20005
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Page(s)
LINE COUNT: 1643
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a **method** of immunising a subject comprising the step of administering a composition comprising an antigen and a carbohydrate polymer comprising mannose to a mucosal site of the subject, **methods** of use of the composition for vaccination and sterilization and use of the composition in manufacturing a medicament.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 4 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2003:240330 USPATFULL
TITLE: Nucleic acid and amino acid sequences relating to Enterococcus faecalis for diagnostics and therapeutics
INVENTOR(S): Doucette-Stamm, Lynn A., 14 Flanagan Dr., Framingham, MA, United States 01701
Bush, David, 205 Holland St., Somerville, MA, United States 02144

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6617156	B1	20030909	
APPLICATION INFO.:	US 1998-134000		19980813	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1997-55778P	19970815 (60)	<--

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Mosher, Mary E.
LEGAL REPRESENTATIVE: Genome Therapeutics Corporation
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1,5,14
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 13738
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated polypeptide and nucleic acid sequences derived from Enterococcus faecalis that are useful in diagnosis and therapy of pathological conditions; antibodies against the polypeptides; and **methods** for the production of the polypeptides. The invention also provides **methods** for the detection, prevention and treatment of pathological conditions resulting from bacterial infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 5 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2003:169096 USPATFULL
TITLE: Nucleic acid sequences and expression system relating to Enterococcus faecium for diagnostics and therapeutics
INVENTOR(S): Doucette-Stamm, Lynn A., Framingham, MA, United States
Bush, David, Somerville, MA, United States
PATENT ASSIGNEE(S): Genome Therapeutics Corporation, Waltham, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6583275	B1	20030624	
APPLICATION INFO.:	US 1998-107532		19980630	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1998-85598P	19980514 (60)	<--
	US 1997-51571P	19970702 (60)	<--

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Marschel, Ardin H.
LEGAL REPRESENTATIVE: Genome Therapeutics Corporation
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 15265
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated polypeptide and nucleic acid sequences derived Enterococcus faecium that are useful in diagnosis and therapy of pathological conditions; antibodies against the polypeptides; and **methods** for the production of the polypeptides. The invention also provides **methods** for the detection, prevention and treatment of pathological conditions resulting from bacterial infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 6 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2003:165967 USPATFULL
TITLE: Diagnostic assays for **determination** of dental caries susceptibility
INVENTOR(S): Gregory, Richard L., Carmel, IN, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003113823	A1	20030619	
APPLICATION INFO.:	US 2002-268017	A1	20021009	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-328537P	20011011 (60)	<--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULLBRIGHT & JAWORSKI L.L.P., 600 CONGRESS AVE., SUITE 2400, AUSTIN, TX, 78701
NUMBER OF CLAIMS: 59
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 1834
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention overcomes the limitations of the prior art by providing rapid assays for predicting the likelihood of caries development in patients. The assays allow implementation of appropriate dental care measures during a patient visit depending on the results of the assay. The assay utilizes the finding that caries-free children and adults have significantly higher levels of naturally occurring protective **salivary** IgA antibody to S. mutans than caries-active subjects. The assays are carried out using patient **saliva.** The speed and ease of use of the assay allows dental practitioners to assess at an early stage the relative risk of future caries formation. With this information, preventive **methods** may be applied only to those **determined** to be at risk.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 7 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2003:130010 USPATFULL
TITLE: Nucleic acid and amino acid sequences relating to Acinetobacter baumannii for diagnostics and therapeutics
INVENTOR(S): Breton, Gary, Marlborough, MA, United States
Bush, David, Somerville, MA, United States
PATENT ASSIGNEE(S): Genome Therapeutics Corporation, Waltham, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6562958	B1	20030513
APPLICATION INFO.:	US 1999-328352		19990604 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-88701P	19980609 (60) <--

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Borin, Michael
LEGAL REPRESENTATIVE: Genome Therapeutics Corporation
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 16618
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated polypeptide and nucleic acid sequences derived from Acinetobacter mirabilis that are useful in diagnosis and therapy of pathological conditions; antibodies against the polypeptides; and **methods** for the production of the polypeptides. The invention also provides **methods** for the detection, prevention and treatment of pathological conditions resulting from bacterial infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 8 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2002:344011 USPATFULL
TITLE: Pretreatment instrument of **saliva** and pretreatment **method** of **saliva**
INVENTOR(S): Matsumoto, Yuko, Tokyo, JAPAN
Kobayashi, Yumiko, Tokyo, JAPAN
Okada, Junichi, Tokyo, JAPAN
PATENT ASSIGNEE(S): GC Corporation, Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002197738	A1	20021226
APPLICATION INFO.:	US 2002-163614	A1	20020607 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-188068	20010621 <--

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC, FOURTH

FLOOR, 1755 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB In a pretreatment instrument and a pretreatment **method** of **saliva**, used for **identification** and **quantitation** of **Streptococcus mutans** in **saliva** by the **immunochromatographic method** utilizing an **antigen-antibody** reaction, the instrument includes a swab and a mixing container for **saliva** and a treatment liquid, the swab having a stick and a soft synthetic resin-made sponge capable of absorbing a **predetermined** amount or more of **saliva**, and the mixing container being made of a transparent or translucent soft synthetic resin and comprising a bag-like portion formed integrally with and continuously to a constricted portion as the end of a tapering introduction portion having an opening thoroughly larger than the sponge, wherein the constricted portion and the bag-like portion have elasticity such that the sponge can be squashed by a finger pressure in a state that the sponge is inserted therein; the constricted portion has a width such that a pressure can be applied by fingers and has a shape such that when the sponge is taken out in a squashed state by the finger pressure, a minimum amount necessary for the pretreatment or more of the **saliva** can be squeezed out.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 9 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2002:66608 USPATFULL
TITLE: Compositions for controlling bacterial colonization
INVENTOR(S): Budny, John A., Westlake Village, CA, UNITED STATES
Budny, Matthew J., Westlake Village, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002037259	A1	20020328	<--
APPLICATION INFO.:	US 2000-735281	A1	20001211 (9)	

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-249674, filed on 12 Feb 1999, GRANTED, Pat. No. US 6159447
Continuation-in-part of Ser. No. US 1997-951393, filed on 16 Oct 1997, GRANTED, Pat. No. US 5871714
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: COLIN P ABRAHAMS, 5850 CANOGA AVENUE, SUITE 400, WOODLAND HILLS, CA, 91367
NUMBER OF CLAIMS: 47
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1282
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A composition for controlling bacterial growth/colonization is provided. The composition comprises a selected enzyme, a selected anchor molecule coupled to the enzyme to form an enzyme-anchor complex, with the anchor being capable of attaching to a substrate proximal to a bacterial colony. The attachment to the substrate permits prolonged retention time of the enzyme-anchor complex where the bacterial colony is present to

increase the effectiveness of the complex. The invention is also for a **method** of controlling colonization of bacterial plaque in the oral cavity, as well as a **method** of forming a composition for controlling the proliferation of bacterial colonies in the oral cavity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 10 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2001:131283 USPATFULL
TITLE: Compounds for altering cell surface sialic acids and **methods** of use therefor
INVENTOR(S): Schnaar, Ronald L., 9094 Goldamber Garth, Columbia, MD, United States 21045
Ichikawa, Yoshitak, 7519 Stream Crossing Rd., Baltimore, MD, United States 21209
Collins, Brian E., 109C Dumbarton Rd., Baltimore, MD, United States 21212
Fralich, Thomas J., 3501 St. Paul St., Baltimore, MD, United States 21218

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6274568	B1	20010814	<--
APPLICATION INFO.:	US 1999-370074		19990806 (9)	

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1998-95493P	19980806 (60)	<--

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Gitomer, Ralph
ASSISTANT EXAMINER: Khare, Devesh
LEGAL REPRESENTATIVE: Fish & Richardson P.C.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1474
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is based on the **identification** of compounds in the form of biosynthetic precursors which can be used to modulate neuronal growth, inhibit cellular entry by pathogens and modulate immune responses. The invention further describes acylated mannosamines, and derivatives thereof, which can be used to alter the sialic acid substituents of sialoglycoconjugates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L35 ANSWER 11 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2000:167495 USPATFULL
TITLE: Compositions for controlling bacterial colonization
INVENTOR(S): Budny, John A., Westlake Village, CA, United States
Budny, Matthew J., Westlake Village, CA, United States
PATENT ASSIGNEE(S): PharmaCal Biotechnologies, LLC, Westlake Village, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6159447		20001212	<--
APPLICATION INFO.:	US 1999-249674		19990212 (9)	

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-951393, filed on 16 Oct 1997, now patented, Pat. No. US 5871714, issued on 16 Feb 1999
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Weddington, Kevin E.
LEGAL REPRESENTATIVE:	Abrahams, Colin P.
NUMBER OF CLAIMS:	47
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:	1272

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A composition for controlling bacterial growth/colonization is provided. The composition comprises a selected enzyme, a selected anchor molecule coupled to the enzyme to form an enzyme-anchor complex, with the anchor being capable of attaching to a substrate proximal to a bacterial colony. The attachment to the substrate permits prolonged retention time of the enzyme-anchor complex where the bacterial colony is present to increase the effectiveness of the complex. The invention is also for a **method** of controlling colonization of bacterial plaque in the oral cavity, as well as a **method** of forming a composition for controlling the proliferation of bacterial colonies in the oral cavity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
=> d his ful

     (FILE 'HOME' ENTERED AT 15:02:56 ON 06 SEP 2005)

     FILE 'HCAPLUS' ENTERED AT 15:03:07 ON 06 SEP 2005
               E TACHINO ATSUSHI/AU
L1           1 SEA ABB=ON  "TACHINO ATSUSHI"/AU
L2             ANALYZE L1 1 CT :       17 TERMS

     FILE 'REGISTRY' ENTERED AT 15:10:35 ON 06 SEP 2005
L3           1 SEA ABB=ON  SODIUM HYDROXIDE/CN
L4           2 SEA ABB=ON  (TARTARIC ACID OR CITRIC ACID)/CN
L5           0 SEA ABB=ON  STREPTOCOCCI MUTANS/CN
               E STREPTOCOCCI MUTANS/CN
               E STREPTOCOCCUS MUTANS/CN
               E CHAPS/CN
L6           2 SEA ABB=ON  (CHAPS/CN OR CHAPSO/CN)

     FILE 'HCAPLUS' ENTERED AT 15:11:51 ON 06 SEP 2005
L7        2147 SEA ABB=ON  (L3 OR ?SODIUM?(W)?HYDROXIDE?) AND (L4 OR (?TARTARI
               C? OR ?CITRIC?)(W)?ACID?)
L8           5 SEA ABB=ON  L7 AND (L6 OR ?CHAPS? OR ?CHAPSO?)
               D AU 1-5
L9          10 SEA ABB=ON  L7 AND (?PRETREAT? OR ?TEST?)(W)KIT?
L10         13 SEA ABB=ON  L8 OR L9
L11          1 SEA ABB=ON  L9 AND ?SALIVA?

     FILE 'MEDLINE, BIOSIS, EMBASE, JAPIO, JICST-EPLUS' ENTERED AT 15:13:54 ON
     06 SEP 2005
L12          1 SEA ABB=ON  L11

     FILE 'USPATFULL' ENTERED AT 15:14:33 ON 06 SEP 2005
L13        195 SEA ABB=ON  L6
L14         19 SEA ABB=ON  L13 AND ?SURF?(W)?ACTIV?

     FILE 'REGISTRY' ENTERED AT 15:15:34 ON 06 SEP 2005
               E TRIS(HYDROXYMETHYL)AMINOMETHANE)/CN
L15          0 SEA ABB=ON  L14 AND ?AMPHOTER?

     FILE 'USPATFULL' ENTERED AT 15:19:17 ON 06 SEP 2005
L16          6 SEA ABB=ON  L14 AND ?AMPHOTER?
L17          5 SEA ABB=ON  L16 AND (PRD<20020909 OR PD<20020909)

     FILE 'HCAPLUS' ENTERED AT 15:46:10 ON 06 SEP 2005
L18          4 SEA ABB=ON  STREPTOCOCCI MUTANS AND (?IDENT? OR ?DETERMIN?)
L19       1336 SEA ABB=ON  ?STREPTOCOCC? ?MUTANS? AND (?IDENT? OR ?DETERMIN?)
L20         78 SEA ABB=ON  L19 AND ?QUANT?
L21         26 SEA ABB=ON  L20 AND ?SALIVA?
L22         11 SEA ABB=ON  L21 AND ?METHOD?
L23          2 SEA ABB=ON  L21 AND KIT?
L24         11 SEA ABB=ON  L22 OR L23
L25          8 SEA ABB=ON  L24 AND (PRD<20020909 OR PD<20020909)

     FILE 'MEDLINE, BIOSIS, EMBASE, JAPIO, JICST-EPLUS' ENTERED AT 15:48:58 ON
     06 SEP 2005
L26         62 SEA ABB=ON  L24
L27         39 DUP REMOV L26 (23 DUPLICATES REMOVED)
L28          4 SEA ABB=ON  L27 AND ?CHROMATOG?
L29          5 SEA ABB=ON  L27 AND ?IMMUNO?
```

kit

1 cit from CA Plus

1 cit from above database

5 cits from US Patfull

8 cits from CAPlus

S. mutans ident.

=> d ibib abs ind l1 1

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:200141 HCAPLUS
DOCUMENT NUMBER: 140:232110
TITLE: Pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatography
INVENTOR(S): **Tachino, Atsushi**
PATENT ASSIGNEE(S): GC Corporation, Japan
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1396726	A1	20040310	EP 2003-18719	20030825
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004101345	A2	20040402	JP 2002-262838	20020909
US 2004106096	A1	20040603	US 2003-645540	20030822
NZ 528008	A	20050324	NZ 2003-528008	20030903
CN 1492230	A	20040428	CN 2003-159144	20030909
PRIORITY APPLN. INFO.:			JP 2002-262838 A	20020909

AB A pretreatment kit and a pretreatment method for saliva in identification and quant. determination of mutans streptococci by immunochromatog. utilizing an antigen-antibody reaction, which can remove aggregation caused by mucin and chain formation of mutans streptococci in saliva in a simple operation and can efficiently flow out a complex of a labeled antibody and mutans streptococci from a porous membrane retaining the labeled antibody, contains (A) a 0.01 to 10 mol/L aqueous solution of sodium hydroxide, (B) a 0.01 to 3 mol/L aqueous solution of tartaric acid and/or citric acid, and (C) a nonionic surface active agent and/or an amphoteric surface active agent, in which the component (C) is mixed with the components (A) and/or (B), or is provided sep., and at least one substance selected from the particular metallic salts is contained in at least one of the components (A), (B) and (C) in an amount of 5 to 25% by weight

IC ICM G01N033-84
ICS G01N033-569

CC 9-10 (Biochemical Methods)
Section cross-reference(s): 10, 14

ST pretreatment kit saliva detn mutans streptococci immunochromatog

IT Reaction
(Antigen-antibody; pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT Surfactants
(amphoteric; pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT Immunoassay
(immunoadsorption chromatog.; pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT Antibodies and Immunoglobulins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(labeled; pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT Surfactants
(nonionic; pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT Membranes, nonbiological
(porous; pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT Aggregation
Concentration (condition)
Flow
Mixing
Mixtures
Saliva
Solutions
Streptococcus mutans
Test kits
Weight
(pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT Mucins
Salts, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

IT 77-86-1, Tris(hydroxymethyl)aminomethane 77-92-9, Citric acid, analysis 87-69-4, Tartaric acid, analysis 1310-73-2, Sodium hydroxide, analysis 7447-40-7, Potassium chloride, analysis 7487-88-9, Magnesium sulfate, analysis 7647-14-5, Sodium chloride, analysis 7785-87-7, Manganese sulfate 7786-30-3, Magnesium chloride, analysis 9005-65-6, Polyoxyethylene sorbitan monooleate 9016-45-9, Nonylphenoxypolyethoxyethanol 9036-19-5, Polyethylene glycol monooctyl phenyl ether 10043-52-4, Calcium chloride, analysis 29836-26-8, n-Octyl-β-D-glucoside 75621-03-3, CHAPS 82473-24-3, CHAPSO 85618-20-8 85618-21-9
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(pretreatment kit for saliva and pretreatment method for saliva for determination of mutans streptococci via immunochromatog.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 7 SEA ABB=ON L28 OR L29 7 cits from other d.b.'s

FILE 'HCAPLUS' ENTERED AT 15:50:44 ON 06 SEP 2005
L31 2 SEA ABB=ON L25 AND ?CHROMATOG?

FILE 'USPATFULL' ENTERED AT 15:50:58 ON 06 SEP 2005
L32 186 SEA ABB=ON L25 AND ?CHROMATOG?
L33 144 SEA ABB=ON L32 AND ?IMMUNO?
L34 39 SEA ABB=ON L33 AND ?ANTIGEN?(W)?ANTIBOD?
L35 11 SEA ABB=ON L34 AND ?MUCIN? 11 cits from USPatfull

FILE HOME

FILE HCAPLUS

FILE COVERS 1907 - 6 Sep 2005 VOL 143 ISS 11
FILE LAST UPDATED: 5 Sep 2005 (20050905/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 SEP 2005 HIGHEST RN 862458-90-0
DICTIONARY FILE UPDATES: 5 SEP 2005 HIGHEST RN 862458-90-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

FILE MEDLINE
FILE LAST UPDATED: 3 SEP 2005 (20050903/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 31 August 2005 (20050831/ED)

FILE RELOADED: 19 October 2003.

FILE EMBASE
FILE COVERS 1974 TO 1 Sep 2005 (20050901/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE JAPIO
FILE LAST UPDATED: 5 SEP 2005 <20050905/UP>
FILE COVERS APR 1973 TO APRIL 28, 2005

<<< GRAPHIC IMAGES AVAILABLE >>>

FILE JICST-EPLUS
FILE COVERS 1985 TO 22 AUG 2005 (20050822/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 6 Sep 2005 (20050906/PD)
FILE LAST UPDATED: 6 Sep 2005 (20050906/ED)
HIGHEST GRANTED PATENT NUMBER: US6941576
HIGHEST APPLICATION PUBLICATION NUMBER: US2005193458
CA INDEXING IS CURRENT THROUGH 6 Sep 2005 (20050906/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 6 Sep 2005 (20050906/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2005

>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.